UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/531,657	03/20/2000	Seng-Wook Sim	P992092	5850

			EXAMINER
33942	7590	04/26/2004	MILLER, BRANDON J

CHA & REITER, LLC
210 ROUTE 4 EAST STE 103
PARAMUS, NJ 07652

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/531,657	SIM ET AL.
	Examiner	**Art Unit**	
	Brandon J Miller	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _13 February 2004_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-18_ is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-18_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

   If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All b)☐ Some * c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____ .

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

   a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _24_ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 11-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Tada in view of Tanaka.

Regarding claim 1 Tada teaches inputting and processing user information for a digital

mobile station (see col. 1, lines 10-16) that includes a touch screen (see col. 3, lines 63-66), and a

control for processing touch screen data generated a from touch screen (see col. 4, lines 13-20).

Tada also teaches displaying and storing touch panel data if more touch panel data is detected

within a time period during a write input mode (see col. 5, lines 45-47 & 61-66 and FIG. 2).

Tada teaches processing information for a digital mobile station (see col. 1, lines 10-14). Tada

does not specifically teach a timer for starting a counter having a predetermined, periodic time

period in response to a digital mobile station entering a write input mode, detecting touch screen

data generated from a touch screen panel was input during an interval of about a 20msecond time

period, touch screen data generated within a predetermined time period during a write input

mode, or determining whether a next touch screen data is generated from a touch screen panel

within a predetermined time period during a write input mode. Tanaka teaches starting a counter

having a predetermined, periodic time period in response to entering a write input mode (see col. 10, lines 62-67 and col. 16, lines 31-41). Tanaka teaches the detecting touch screen data generated from a touch screen panel was input during an interval of about a 20msecond time period determining whether a next touch screen data is generated from the touch screen panel within a next predetermined time period; and, if the next touch screen data is detected within the next predetermined time period, displaying and storing the next touch screen data (see col. 13, lines 3-15 and FIG. 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include a timer for starting a counter having a predetermined, periodic time period in response to a digital mobile station entering a write input mode, detecting touch screen data generated from a touch screen panel was input during an interval of about a 20msecond time period, touch screen data generated within a predetermined time period during a write input mode, and determining whether a next touch screen data is generated from a touch screen panel within a predetermined time period during a write input mode because this would allow for touch screen data to be inputted and processed on a variety of mobile devices.

Regarding claim 2 Tada teaches connecting touch screen data with a next touch screen data as a continuous input (col. 2, lines 41-45).

Regarding claim 3 Tanaka teaches the predetermined time period that is determined so that processing the touch screen data generated from the touch screen panel does not interfere with another predetermined time period (see col. 16, lines 31-39).

Regarding claim 4 Tanaka teaches the predetermined time period is set at one time slot in the control module and the another time period is set at another time slot in the control module (see col. 16, lines 31-39).

Regarding claim 5 Tanaka teaches a predetermined time period required for sampling handwritten stroke data (see col. 13, lines 3-9).

Regarding claim 6 Tanaka teaches a predetermined time period that can be approximately set (see 16, lines 31-32).

Regarding claim 11 Tada teaches processing user information inputted through a touch screen for a portable digital device (see col. 1, lines 10-16 and col. 3, lines 63-66). Tada teaches a digital mobile station in a write input mode (see col. 1, lines 11-16). Tada also teaches displaying generated touch screen data in a display by connecting a series of touch screen data generated at a time period interval if the touch screen data generated at the time period is a continuous input (see col. 6, lines 28-35 and Fig. 1). Tada teaches processing information for a digital mobile station (see col. 1, lines 10-14). Tada does not specifically teach a timer for repeatedly detected touch screen data during an interval of about a 20msecond, periodic time period while a digital mobile station is in a write input mode. Tanaka teaches a timer for repeatedly detected touch screen data during an interval of about a 20msecond, periodic time period while in a write input mode (see col. 13, lines 3-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include a timer for repeatedly detected touch screen data during an interval of about a 20msecond, periodic time period while a digital mobile station is in a write input mode because this would allow for touch screen data to be inputted and processed on a variety of mobile devices.

Regarding claim 12 Tanaka teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 13 Tanaka teaches a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 14 Tanaka teaches a device as recited in claim 5 and is rejected given the same reasoning as above.

Regarding claim 15 Tanaka teaches a device as recited in claim 6 and is rejected given the same reasoning as above.

Regarding claim 16 Tada teaches a digital mobile station having a touch screen panel as input means (see col. 1, lines 10-16 and col. 3, lines 63-66). Tada also teaches displaying and storing touch panel data if more touch panel data is detected within a time period (see col. 5, lines 45-47 & 61-66 and FIG. 2). Tada teaches generating a signal for displaying detected touch screen data on a display unit (see col. 5, lines 45-47 & 61-66 and FIG. 2). Tada teaches generating a signal for storing the detected touch screen panel data in a memory (see col. 4, lines 61-67). Tada does not specifically teach a timer for performing the counting of about a 20msecond time interval in response to a timer control signal corresponding to an entry of a write input mode, or a control module for generating a timer control signal, determining whether another touch screen panel data is detected corresponding to a next predetermined time interval. Tanaka teaches a timer for performing the counting of about a 20msecond time interval in response to a timer control signal corresponding to an entry of a write input mode (see col. 10, lines 62-67 and col. 16, lines 31-41). Tanaka teaches generating a timer control signal, determining whether another touch screen panel data is detected corresponding to a next

predetermined time interval (see col. 13, lines 3-15 and FIG. 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include a timer for performing the counting of about a 20msecond time interval in response to a timer control signal corresponding to an entry of a write input mode, and a control module for generating a timer control signal, determining whether another touch screen panel data is detected corresponding to a next predetermined time interval because this would allow for an image processing method capable of efficiently grouping a plurality of input image data.

Regarding claim 18 Tada teaches a digital mobile station having a touch screen panel as input means (see col. 1, lines 10-16 and col. 3, lines 63-66). Tada also teaches displaying and storing touch panel data if more touch panel data is detected within a time period (see col. 5, lines 45-47 & 61-66 and FIG. 2). Tada teaches generating a signal for displaying detected touch screen data on a display unit (see col. 5, lines 45-47 & 61-66 and FIG. 2). Tada teaches generating a signal for storing the detected touch screen panel data in a memory (see col. 4, lines 61-67). Tada teaches displaying detected touch screen data on a display by connecting a series of touch screen data if the series of touch screen data detected during a predetermined time is one continuous line (see col. 6, lines 28-35). Tada does not specifically teach a timer for performing the counting of about a 20msecond time interval in response to a timer control signal corresponding to an entry of a write input mode, or a control module for generating a timer control signal, determining whether another touch screen panel data is detected corresponding to a next predetermined time interval. Tanaka teaches a timer for performing the counting of about a 20msecond time interval in response to a timer control signal corresponding to an entry of a write input mode (see col. 10, lines 62-67 and col. 16, lines 31-41). Tanaka teaches generating a

control signal, for displaying data on a display unit by connecting a series of touch screen data is

detected during a predetermined time interval is one continuous line (see col. 13, lines 3-15 and

FIG. 13). It would have been obvious to one of ordinary skill in the art at the time the invention

was made to make the invention adapt to include a timer for performing the counting of about a

20msecond time interval in response to a timer control signal corresponding to an entry of a

write input mode, or a control module for generating a timer control signal, determining whether

another touch screen panel data is detected corresponding to a next predetermined time interval

because this would allow for an image processing method capable of efficiently grouping a

plurality of input image data.

Claims 7-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada

in view of Tanaka and Kuriyama.

Regarding claim 7 Tada teaches inputting and processing user information for a digital

mobile station (see col. 1, lines 10-16) that includes a touch screen (see col. 3, lines 63-66), and a

control for processing touch screen data generated a from touch screen (see col. 4, lines 13-20).

Tada teaches a write input mode for a portable device (see col. 1, lines 11-16). Tada teaches

determining whether the generated touch screen data within a predetermined time period is one

continuous input (see col. 2, lines 30-32). Tada teaches determining whether touch screen data is

generated after the expiration of the predetermined time period (see col. 2, lines 25-30, lines and

Fig. 2). Tada also teaches displaying and storing the generated touch screen data in a display and

memory (see col. 6, lines 28-35 and Fig. 1). Tada teaches processing information for a digital

mobile station (see col. 1, lines 10-14). Tada does not specifically teach determining whether

about a 20msecond, periodic period of time has occurred, determining whether touch screen data

is generated after a predetermined time period has occurred, determining if the generated touch screen data is one continuous line within the predetermined time period, or if the generated touch data is not one continuous line, displaying and storing the generated touch screen data as a new starting line in the display unit and a buffer. Tanaka teaches determining whether about a 20msecond, periodic period of time has lapsed (see col. 13, lines 3-9). Tanaka teaches if generated touch data is one continuous line within a predetermined time period, displaying and storing the generated touch screen data in a display unit (see col. 13, lines 3-12 and FIG. 13). Kuriyama teaches generated touch data that is not one continuous line and displaying and storing the generated touch screen data as a new starting line in the display unit and a buffer (see col. 7, lines 64-67 and col. 8, lines 5-15 and FIG. 3B). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include determining whether about a 20msecond, periodic period of time has occurred, determining whether touch screen data is generated after a predetermined time period has occurred, determining if the generated touch screen data is one continuous line within the predetermined time period, and if the generated touch data is not one continuous line, displaying and storing the generated touch screen data as a new starting line in the display unit and a buffer because this would allow for touch screen data to be inputted and processed on a variety of digital mobile devices.

Regarding claim 8 Tanaka teaches a detected handwritten stroke data within a predetermined time period (see col. 13, lines 3-9).

Regarding claim 9 Tanaka teaches a device as recited in claim 3 and is rejected given the same reasoning as above.

Regarding claim 10 Tanaka teaches a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 17 Tada teaches a digital mobile station having a touch screen panel as input means (see col. 1, lines 10-16 and col. 3, lines 63-66). Tada also teaches displaying and storing touch panel data if more touch panel data is detected within a time period (see col. 5, lines 45-47 & 61-66 and FIG. 2). Tada teaches generating a signal for displaying detected touch screen data on a display unit (see col. 5, lines 45-47 & 61-66 and FIG. 2). Tada teaches generating a signal for storing the detected touch screen panel data in a memory (see col. 4, lines 61-67).). Tada teaches determining whether touch screen data is generated after the expiration of the predetermined time period (see col. 2, lines 25-30, lines and Fig. 2). Tada does not specifically teach a timer for repeatedly counting of about a 20msecond time interval in response to a timer control signal corresponding to an entry of a write input mode, a control module for generating a timer control signal, determining if touch detected touch screen panel data is not one continuous line within the predetermined time interval, or respectively generating control signals for displaying the detected touch screen panel data as start of a new line on the display unit and storing the detected touch screen data. Tanaka teaches a timer for performing the counting of about a 20msecond time interval in response to a timer control signal corresponding to an entry of a write input mode (see col. 10, lines 62-67 and col. 16, lines 31-41). Tanaka teaches generating a timer control signal, determining whether another touch screen panel data is detected corresponding to a next predetermined time interval (see col. 13, lines 3-15 and FIG. 13). Kuriyama teaches generated touch data that is not one continuous line and displaying and storing the generated touch screen data as a new starting line in the display unit and a buffer (see

col. 7, lines 64-67 and col. 8, lines 5-15 and FIG. 3B). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the invention adapt to include a timer for repeatedly counting of about a 20msecond time interval in response to a timer control signal corresponding to an entry of a write input mode, a control module for generating a timer control signal, determining if touch detected touch screen panel data is not one continuous line within the predetermined time interval, and respectively generating control signals for displaying the detected touch screen panel data as start of a new line on the display unit and storing the detected touch screen data because this would allow for an image processing method capable of efficiently grouping a plurality of input image data.

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakashima U.S Patent No. 6,369,807 discloses an online character entry device.

Sakamoto U.S. Patent No. 5,389, 745 discloses a handwriting input apparatus for inputting handwritten data from unspecified direction.

Hawkins U.S. Patent No. 6,295,372 discloses a method and apparatus for handwriting input on a pen based palmtop computing device.

Narayanaswamy U.S. Patent No. 6,167,411 discloses a user interface for entering and editing data in data entry fields.

Sites U.S. Patent No. 6,408,092 discloses a handwritten input in a restricted area.

Chisaka U.S. Patent No. 5,864,636 discloses a device for inputting characters by handwriting.

Parthasarathy U.S. Patent No. 6,275,611 discloses a handwriting recognition device, method and alphabet with strokes grouped into stroke-substructures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-2222. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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April 21, 2004

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600